The third principle: holonic organization

A holon is "something that is simultaneously a whole in and of itself, as well as a part of a larger whole" (Wikipedia)

The term was coined by Arthur Koestler

In Koestler's formulations, a holon is something that has integrity and identity while simultaneously being a part of a larger system; it is a subsystem of a greater system

Source: wikipedia

Holons can be understood as the constituent part-wholes of a hierarchy (Wikipedia)

A holon participates in a larger organism, system or hierarchy

Examples of holons: (next slide)

A cell in the human body (or for that matter, animal or plant) is itself a holon within that body

In the course of evolution, cells differentiate to form tissues, organs and organ systems, being kinds of holons or subsystems themselves A study of subsystems of complex systems, especially in the biological realm has been made by James Grier Miller

His Living Systems Theory (LST) as of 1978 posits about ten subsystems for matter-energy processing and eleven subsystems for information processing

Miller's system seems to lack higher order subsystems dealing with ethics, creativity (higher order functions of the mind)

So, more research on psychological subsystems is necessary to extend his theory to include meaning, values, morality, creativity and spirituality

As for holarchical relationships between the kingdoms of nature, one can point out that:

hairs on the animal and human skin are a remnant of our evolutionary past: they seem to have their origin in plants

Minerals play an important part in the bone structure of animals and humans

The animal part within the human being is well known and has been studied by famous psychologists like Freud, Jung, etc.

Passions and hard to control desires are well documented in literature

Plato's analogy of the chariot with two horses, one white and one black, and a driver that tries to keep the chariot under control is well known

Plato's Phaedrus dialogue explains that the white horse (the will) has become infatuated with the black horse (passions) and that the charioteer has lost control over the carriage (the human frame)

The charioteer has to bring reason in effect to control the carriage again

Suppose that one has a discussion with another person Beliefs and standpoints differ. The situation gets tense and moods are getting heated.

Each person has a choice: they can let their temper get out of hand or restrain themself and try to calm down

Moral nature can restrain base impulses, so it influences the animal part in us, including brain function.

The function of impulse control is well known in psychological literature

So, here we can see control and feedback functions at work in the human being, including the human nervous system

In my book "Resonance with the Self", appendix B, I describe qualities working in the human psyche

Mastery of the opposites of qualities can be obtained by developing the observing ego function

Psychologists speak about meta-functions, like meta-emotion: the ability to have feelings *about* emotions one has

So, this points to the existence of meta-levels, holarchical, within the human being

These levels reflect as a control hierarchy within the human brain

Stafford Beer has written an informative book on that control hierarchy, called:

"The brain of the firm", and applied the principles he discovered to the management of a firm.

Another example of a holarchy (holons functioning in a hierarchy) can be seen in the monadic model of G. de Purucker

See my book "Resonance with the Self", appendix A, for more information

Lastly, human beings are holons in the *body* of Gaia, Mother Earth, where they (should) fulfill the function of taking care of the planet in its objective aspect (as plants and animals do on a lower level)

Humans are messing up the ecosphere and need to learn an important lesson: whatever one does to the web of life, one does to oneself

This is lesson 101 for humanity

Thanks for watching!